

# Sauk County Landfill Final Use Plan - 2006

## Management Unit #18



This area is the former clay borrow area for the landfill site. Past management practices have been aimed at reforestation of this area. The Committee recommends that these efforts be continued, with future planting efforts aimed at increasing the diversity of the plantings.

### Cost of Conservation/Stewardship Measures

The Environmental Resources Committee anticipates minimal costs in the implementation of the aforementioned conservation measures. Trees seedlings are relatively inexpensive, and thousand can be planted with volunteer labor at mere pennies per tree. Wherever possible, the Committee recommends utilizing volunteer labor, perhaps involving the schools for tree planting (Earth Day projects), or Huber center inmates for brush cutting. Tree harvesting & pine plantation removal is expected to generate revenues. Any mowing which may become necessary to control undesirable vegetation is unlikely to exceed a couple thousand dollars per year. Additionally, the Committee recommends that efforts be made to seek out & apply for grant funding to support these efforts wherever possible.

### Purchase of Neighboring Properties

In addition to the conservation measures proposed for property currently owned by Sauk County, the Committee recommends purchase of property and/or property development rights for two adjoining parcels. The parcel considered the highest priority for acquisition is the Lyle Shaw property, which is a forty acre, wooded parcel lying immediately east of Landfill No. 1. This parcel was the subject of an appraisal performed in 2002 by Tenny Albert, Wisconsin Certified General Appraiser #154. The appraisal yielded a market value of \$92,000 for the parcel (\$2,300 per acre). Groundwater contamination from Landfill No. 1 has been detected on this property, and Sauk County installed four groundwater monitoring wells here as part of its ongoing groundwater monitoring program. Acquisition of this parcel is viewed as very important in terms of managing Sauk County's long-term risk relating to the landfill site(s).

The other parcel targeted for acquisition lie to the west of County property, along Hogback Road. This parcel encompasses approximately 20 acres and groundwater contamination is likely to be present in this area as well. Sauk County currently monitors the water supply for many of the residents along Hogback Road south and west of the landfill site.

# **Sauk County Landfill Final Use Plan - 2006**

The Committee is concerned that someday, someone will purchase these properties and erect a home on them, as they are in fact buildable parcels under the Town of Excelsior's land use plan. If this were to occur, Sauk County may face additional long-term costs associated with monitoring these properties and possible compensation to affected property owners.

In support of this recommendation, the Committee sought the advice and opinion of a hydrogeologist with the State of Wisconsin Geological and Natural History Survey, who confirmed and agreed with the Committee recommendations for parcel acquisition.

Currently, it is estimated that the cost to acquire these parcels, in a fee simple purchase scenario, would be \$198,000 (\$3,300 per acre). It may be possible to attempt to reduce this cost by acquisition through the condemnation process. Cost to acquire the property development rights on these parcels is conservatively estimated at \$120,000 (\$2,000 per acre).

Monies for the proposed property acquisitions are currently available within the solid waste funds. The Committee requests, however, that funds previously set aside for property development rights which have existed in the County's budget as a continuing appropriation for the past several years, be considered before using the solid waste fund.

## **Recreation**

The Environmental Resources Committee supports and recommends that the following recreational activities be continued and/or permitted on the landfill property.

### **Snowmobile Trail**

A portion of the Sauk County Snowmobile Trail transects eastern and northern portions of the property. The trail is maintained by the Sauk County Snowmobile Association, with the Baraboo club maintaining the trail section east and south of the former clay borrow area and the Reedsburg club maintaining the trail section north of the clay borrow ridge.

If this section of trail were ever lost, it would be extremely difficult to reroute the trail around the landfill property given the number of landowners which would be involved. Therefore, the Committee recommends that this use be welcomed and continued.

### **Hunting**

Hunting has always been permitted on the landfill property and the Committee recommends that this practice be continued, with some modification. Due to continuing residential development in the vicinity of the landfill site, and to reduce the potential for conflicts with ongoing site operations, it is appropriate that access to certain areas of the property be limited as follows:

- Access to Area #15 shall be closed to the general public for all activity at such time that the Sheriff's Department relocates its shooting range to the basin west of the landfill. Hunting in the vicinity of the existing range (in particular, the wooded area east of the existing range) shall be limited to those times when the range is inactive. Hunting shall be prohibited within the two six foot high chainlink enclosures surrounding each of the County's landfills..

# **Sauk County Landfill Final Use Plan - 2006**

- Hunting shall be limited to means of archery and shotgun (birdshot) only in areas bounded by the four-foot high woven wire fence which encompasses the southern two-thirds of the property.
- Firearms shall be unloaded and cased while traversing through Area #6, as shown on the attached base map.
- Hunting with rifles shall be permitted on County-owned property which exists east and north of the existing four-foot high woven wire fence.
- Erection of permanent tree stands is prohibited. Portable tree stands are allowed, and need not be removed on a daily basis provided that said stands carry the users name, address and telephone number.

As part of an effort to reach out to stakeholders in this planning effort, the Sauk County Sportsman's Alliance was contacted. After hearing a presentation from County staff concerning recreational activities and opportunities at the landfill site, the Alliance voted unanimously to urge County decision makers to include provisions for public hunting access in the final use plan for the landfill property.

## **Other permitted uses**

The Environmental Resources Committee recommends that the following recreational activities be permitted on the property in all areas of the property with the exception of Area #15, Area #6, and areas enclosed by chain-link fencing:

- Dog walking/training
- Hiking
- Wildlife/flora/fauna photography
- Berry picking
- Bird watching
- Snowshoing (not on snowmobile trail)
- Cross country skiing (not on snowmobile trail)

## **Prohibited recreational activities**

The Environmental Resources Committee recommends the following activities be prohibited at the Sauk County Landfill site:

- Operation of ATV's or dirt bikes
- Camping
- Swimming

## **Possible future recreational opportunities**

The Environmental Resources Committee recommends that the following recreational activities be investigated for possible inclusion to the list of permitted activities in future years:

- Horseback riding/horseback trail
- Sponsorship of youth hunt for deer/turkeys
- Sponsorship of disabled persons hunt for deer/turkeys

# Sauk County Landfill Final Use Plan - 2006

## Education

The Environmental Resources Committee recommends that the landfill property be made available for use by local school districts for educational purposes. As part of this planning effort, school district administrators were contacted regarding their interests in utilizing the landfill site. Several schools responded positively to the inquiry. Facilitating use of the property by the schools for educational purposes may involve some County staff time (tours, for instance), but these costs are expected to be minimal. The types of educational activities may include:

- Tours of the landfill gas/microturbine facility
- Tours of the closed landfill sites with emphasis on landfill design, groundwater protection, and importance of recycling
- Opportunities to observe and/or participate in conservation activities at the site such as tree planting, prairie restoration & wildlife management
- Use of the site as an outdoor laboratory for biological or earth sciences.

Over the past several years, many students have visited the Sauk County Landfill site for tours & other activities. No new facilities are needed or proposed to facilitate educational uses of the property.

## County Department/Other Governmental Services

At this time, two Sauk County entities have expressed an interest in utilizing the landfill property. The Sauk County Officers Range Association, comprising numerous State and local law enforcement agencies, including the Sauk County Sheriff's Department, currently operates a firearms qualifications/training range on the landfill property. Currently, over 200 officers utilize the shooting range for training purposes. Significant growth in the number of participating law enforcement agencies is anticipated in the future, and range facilities need to be expanded in order to safely and efficiently handle the number of officers using the range. The existing range currently does not meet the range design standards included in the Sauk County Code of Ordinances.

In addition to firearms training at the shooting range, the Range Association has expressed an interest in utilizing the existing maintenance building at the landfill for tactical training purposes. Conversion of the building for tactical training purposes would involve the construction of interior walls, floors and staircases in the equipment storage portions of the structure. Training in this building would involve the use of simmunition, not live ammo. This building currently holds the Solid Waste Manager's office and is used for equipment storage, Clean Sweep events, and the Sauk County Land Conservation Department Tree Sale distributions. Additionally, the Sheriff's Department would like to utilize the paved areas on the landfill property for vehicle operations training purposes. Enlargement of the paved surface area is likely if this use is authorized.

The Sauk County Highway Department may also be interested in utilization of the landfill property in the future, particularly if the County decides to sell property where the West Baraboo and Reedsburg shops are currently located. The Highway Department has estimated that they would require approximately 20 acres of land to relocate to the landfill site. Relocation of Highway Department operations to the landfill site presents an opportunity to utilize the waste heat energy from the microturbine facility to heat the new buildings. However, it is apparent that such relocation may still be

## **Sauk County Landfill Final Use Plan - 2006**

a number of years away, and the microturbine facility has a finite capacity to provide heat energy, so this potential should be viewed with caution.

At this time, the Committee recommends assigning priority to the Sauk County Officers Range Association's proposed usage of the property as their needs are much more immediate than the needs of the Highway Department. Existing facilities are cramped, undersized, decrepit and out-of-date. Additionally, accommodations have already been made for a possible expansion of the shooting range, if this activity is in fact relocated to the recommended area. Shooting ranges are almost as difficult to site as landfills, so it is unlikely that off-site alternatives will arise at any time in the near future.

Specifically, the Committees recommendations concerning other Departmental interests in the landfill facility and property are as follows:

- Facilitate the relocation of the existing range to the basin west of the recently closed landfill. Restrict all shooting activity to this area.
- Consider use of existing solid waste funds to construct a new shoot house & range office, with reimbursement scheduled from range officers fund.
- Allow Range Association to utilize the paved areas on the property for vehicle training purposes.

### **Future Staffing and Alternatives**

Upon consideration of several staffing alternatives, the Committee is recommending that the funding for the Solid Waste Manager position be removed from the 2007 Solid Waste Department budget request, that the position be eliminated, and that the duties of this position be transferred to other internal agencies or private sector services.

The Committee is recommending that responsibilities pertaining to land stewardship, the operation of the microturbine facility, and care and maintenance of gas extraction systems, leachate storage & pumping facilities, and scale facilities be transferred to the Land Conservation Department. The individual assigned these duties should plan on committing 5-10 hours per week to these duties. The Land Conservation Department would also be responsible for managing private sector service contracts for leachate hauling and WDNR-required groundwater and landfill gas monitoring. The physical maintenance needs of the property (buildings, utilities, mowing, snow removal) should be transferred to EMBS, who may chose to contract with private sector firms to perform maintenance tasks, or utilize the capabilities of the Highway Department where appropriate.

An additional option considered by the Committee is the option of contracting with private sector firms for facility maintenance, oversight and monitoring. Conversations with RMT, Inc., the County's long-standing engineering consultant, yielded an estimate of approximately \$50,000 per year to perform the WDNR required monitoring of the gas system and to assume the County's role in the agreement with Alliant Energy for operation of the microturbine facility. This estimate was contingent upon the installation of a remote monitoring system for the microturbine facility at a cost of approximately \$130,000. This system would provide for off-site monitoring and startup of the facility on a 24/7 basis. The Committee is proposing moving forward with development of the remote monitoring system as a means of minimizing staff time associated with monitoring the operation of the microturbine facility.



# Sauk County Landfill Final Use Plan - 2006

## Financial Projection

NO STAFF / NO PROGRAMS		2007	2008	2009	2010	2011	
	DNR LONG-TERM CARE INVESTMENT	2,400,000					Paid out over 40 years Returned to County at the end of 2006
	CLOSURE INVESTMENT	920,000					
	REMEDIAION INVESTMENT	2,487,140					
	CASH BEGINNING OF YEAR	5,807,140	5,814,945	5,770,935	5,923,343	6,085,735	
<b>63060</b>	<b>SOLID WASTE SITE REVENUE</b>						
424520	SOLID WASTE GRANTS/AIDS (CLEAN SWEEP)	0	0	0	0	0	
464300	SOLID WASTE USER FEES	0	0	0	0	0	
464300	SOLID WASTE USER FEES (ROLLOFF LEASES)	15,010	5,333	0	0	0	
464500	WASTE TO ENERGY REVENUES	21,600	21,600	21,600	21,600	21,600	
	INTEREST ON INVESTMENTS	188,732	188,986	187,555	192,509	197,786	
481400	INTEREST ON LNG TRM CR INVEST	98,978	99,443	99,857	100,216	100,517	
481410	INTEREST ON CLOSURE INVESTMENT	0	0	0	0	0	
493160	ENTERPRISE FUND R/E APPLI	0	0	0	0	0	
	<b>TOTAL REVENUE</b>	<b>324,320</b>	<b>315,362</b>	<b>309,012</b>	<b>314,325</b>	<b>319,903</b>	
<b>63060370</b>	<b>SANITARY SOLID WASTE</b>						
511100	SALARIES PERMANENT REGULAR	0	0	0	0	0	
511200	SALARIES PERMANENT OVERTIME	0	0	0	0	0	
511900	LONGEVITY FULL TIME	0	0	0	0	0	
512100	WAGES PART TIME	0	0	0	0	0	
512200	WAGES PART TIME OVERTIME	0	0	0	0	0	
514100	FICA & MEDICARE TAX	0	0	0	0	0	
514200	RETIREMENT COUNTY SHARE	0	0	0	0	0	
514300	RETIREMENT EMPLOYEES SHARE	0	0	0	0	0	
514400	HEALTH INSURANCE COUNTY SHARE	0	0	0	0	0	
514500	LIFE INSURANCE COUNTY SHARE	0	0	0	0	0	
514600	WORKERS COMPENSATION	0	0	0	0	0	
514800	UNEMPLOYMENT	17,108	0	0	0	0	
520100	CONSULTANT & CONTRACTUAL	0	0	0	0	0	
520900	CONTRACTED SERVICES (CO. STAFFING)	26,000	26,780	27,583	28,411	29,263	Assumes 10 hours/week for Co. Staff
520900	CONTRACTED SERVICES (GAS MONITORING)	20,000	20,600	21,218	21,855	22,510	Assumes contracting to private sector
520900	CONTRACTED SERVICES (SNOW REMOVAL)	8,000	8,240	8,487	8,742	9,004	Assumes contracting to private sector
520900	CONTRACTED SERVICES (MOWING)	5,000	2,500	2,575	2,652	2,732	Assumes contracting to private sector
522100	WATER TREATMENT (LEACHATE)	45,500	43,500	35,500	27,500	25,220	Assumes contracting to private sector
522500	TELEPHONE & DAIN LINE	2,500	2,575	2,652	2,732	2,814	Need 4 lines to microturbine facility
522900	UTILITIES	5,150	5,305	5,464	5,628	5,796	
523100	GROUNDWATER MONITORING	38,360	39,511	40,696	41,917	43,175	Assumes contracting to private sector
530500	LICENSES & PERMITS	6,740	140	140	140	140	
531100	POSTAGE & BOX RENT	0	0	0	0	0	
531200	OFFICE SUPPLIES & EXPENSES	0	0	0	0	0	
531400	SMALL EQUIPMENT	0	0	0	0	0	
531800	MIS DEPARTMENT CHARGEBACKS	0	0	0	0	0	
532600	ADVERTISING	0	0	0	0	0	
532800	TRAINING & INSERVICE	0	0	0	0	0	
533000	PESTICIDE/CLEAN SWEEP	0	0	0	0	0	
533200	MILEAGE	0	0	0	0	0	
534910	SITE RESTORATION	0	0	0	0	0	
535000	REPAIRS & MAINTENANCE	5,000	5,000	5,000	5,000	5,000	For equipment failures, which always occur.
535900	EQUIPMENT AND MAINTENANCE	0	0	0	0	0	
539800	EQUIPMENT LEASE	0	0	0	0	0	
555100	INSURANCE	5,000	5,000	5,000	5,000	5,000	
551600	INSURANCE MONIES & SECURITIES	0	0	0	0	0	
551900	INSURANCE GENERAL LIABILITY	2,157	2,222	2,288	2,357	2,428	
581900	CAPITAL OUTLAY	130,000	198,000	0	0	0	Install remote monitoring in 2007, purchase adjoining properties in 2008.
	<b>TOTAL EXPENSES</b>	<b>316,515</b>	<b>359,372</b>	<b>156,604</b>	<b>151,933</b>	<b>153,082</b>	
	<b>ADDITION TO / (USE OF) CASH</b>	<b>7,805</b>	<b>(44,010)</b>	<b>152,408</b>	<b>162,392</b>	<b>166,822</b>	\$445,417 Added to Fund Balance over 5 years.

## Sauk County Landfill Final Use Plan - 2006

In the preceding table, the recommendations of the Environmental Resources Committee have been reduced to numbers. This table presents a conservative view of the solid waste budget for the next five years. It was necessary to make several assumptions in the development of this financial projection. These assumptions include:

- Interest on investments was projected at 3.25% annually.
- Income from microturbine facility assumes the facility operates 90% of potential time.
- County staffing time to operate the microturbine facility was projected at 10 hours/week at \$50/hour with 3% increase annually after 2007.
- All WDNR-required gas and groundwater monitoring will be contracted to private sector. Assumes 3% annual increase in cost after 2007.
- All snow plowing and mowing will be contracted to private sector. Assumes 3% annual increase in cost after 2007.
- Current leachate hauling services contract will be extended through 2011. Hauling and other leachate management costs (treatment & line jetting) were assumed to increase 3% per year after 2007.
- Sauk County will retain the services of RMT, Inc. to construct a remote monitoring system for the microturbine facility in 2007 at a cost of \$130,000.
- Sauk County will acquire @60 acres of adjoining property in 2008, at a cost of \$198,000.
- Utilities & telephone costs were assumed to increase 3% annually after 2007.

The budget projection shows that Sauk County can easily sustain the mode of operation contemplated within the final use plan. Without offering any solid waste management programs such as Clean Sweep, consumer electronics collections, etc., the fund is anticipated to grow by approximately \$445,000 over the next five years. The occasional offering of special waste collection programs or future land stewardship initiatives should be viewed as affordable and sustainable under this budget forecast. With proper stewardship, the resources of the solid waste fund should be sufficient to address to long-term care needs of the County's two closed landfills well beyond the 40 year long-term care period, while providing ongoing revenue sources for other programs or initiatives related to solid waste management or landfill site restoration.

# Sauk County Landfill Final Use Plan - 2006

## Final Recommendations

After careful consideration, the Environmental Resources Committee makes the following recommendations in accordance with the following mission & vision statements for future operations:

### Mission & Vision

#### Mission Statement:

*“To develop the asset of the former landfill site and its property, by investigating and implementing compatible property uses. To facilitate the distribution of resources and responsibilities for the long-term care, restoration and management of the County landfill facility. To provide financially sustainable waste management programs or services which are consistent with local community needs.”*

#### Vision Statement:

*“That the landfill site property be kept intact and managed as a multipurpose public-use facility which utilizes an environmental basis for future land use decisions. Second, that areas degraded by former landfill operations are appropriately restored and quality educational & recreational opportunities are created at the site for Sauk County residents. Further, that existing assets are utilized to create or maintain sustainable waste management programs which serve to reduce dependence on landfilling, offer convenience and cost savings to Sauk County residents and serve to improve the overall quality of life in Sauk County.”*



# Sauk County Landfill Final Use Plan - 2006

## **Recap of Final Recommendations & Conclusions**

In Summary, the recommendations of the Environmental Resources Committee include the following:

- The landfill property should be kept intact and offered for public recreational and educational uses, as described in this document.
- Financial assets related to the landfill site should be preserved and managed such that funds are available for the long-term care of the closed landfills, continued site restoration efforts, and the occasional offering of special waste collection programs, without impacting the general tax levy.
- The landfill property should not be considered in future years as a probable location for a new solid waste disposal site.
- Management of the landfill property should be made with sensitivity towards the unique ecological resources present on the property. Any future development should be confined to highly disturbed areas, as described in this document.
- Sauk County should stay the present course of deferring responsibility for solid waste disposal and recycling to the local units of government within Sauk County.
- Sauk County should undertake an annual review of regulations, technology and marketplace conditions to determine if changes to its strategy are necessary or appropriate.
- Sauk County should purchase adjoining properties, as described in this document, in order to mitigate future risks.
- The existing shooting range should be relocated on the landfill property to the area west of Landfill No. 2.
- The Environmental Resources Committee and Solid Waste Department should be dissolved, effective December 31, 2006.
- Responsibilities pertaining to long-term care of the closed landfills and operation of the microturbine facility should be transferred to the Land Conservation Department with oversight by Agriculture, Extension, Education & Land Conservation Committee.
- Responsibilities pertaining to snow removal and mowing at the landfill site should be transferred to the Highway/Parks Department with oversight by Transportation & Parks Committee.
- Responsibilities pertaining to the physical maintenance needs of the property (other than snow removal & mowing), such as buildings and utilities should be transferred to Emergency Management, Buildings and Safety, with oversight by the Property Committee.
- Coordination of the transfer of responsibilities for the landfill site should be under the purview of the Administrative Coordinator.
- Sauk County should continue to cooperate with Alliant Energy on the development and operation of the microturbine facility. Sauk County should develop a remote monitoring system for the microturbine facility, in order to minimize staff time spent on monitoring facility operations.
- All WDNR-required monitoring for groundwater and landfill gas should be contracted to private-sector operators in order to assure continued compliance.
- Chapter 15 of the Sauk County Code of Ordinances should be repealed in its entirety.
- The waste oil collection tank should be relocated to the Highway Department West Baraboo Shop and operated as a public-use waste oil collection facility. The existing scale facility at the landfill site should be maintained in its current location, so as to preserve a convenient means of determining leachate volumes hauled from the landfill site. The existing fuel oil tank at the landfill site should be sold to the highest bidder. The maintenance building should be maintained and utilized for storage, Clean Sweep, tree sale distributions or other uses consistent with this document.

# Sauk County Landfill Final Use Plan - 2006

## References

Natural Resources Consulting, Inc. *Sauk County Landfill Conservation Plan*. January, 2006.

Wisconsin Administrative Code, Chapters NR 500 through 538. January, 2006.

Wisconsin Department of Natural Resources. *Superfund Fact Sheet - Proposed Plan Sauk County Landfill, Excelsior, Wisconsin*. September, 1993.

## Glossary / Acronyms (as they apply to the Sauk County Solid Waste Site)

DNR: Wisconsin Department of Natural Resources. Wisconsin's regulatory agency overseeing landfills and solid waste sites.

EPA: United States Environmental Protection Agency. The Federal agency managing the Superfund program, responsible for helping get contaminated sites cleaned up.

Leachate: Water or other liquid that has percolated through or contacted solid waste or gasses generated by solid waste.

MREA: Midwest Renewable Energy Association. Promotes renewable energy, energy efficiency, and sustainable living through education and demonstration. <http://www.the-mrea.org/>

NPL: National Priorities List, as compiled by the United States Environmental Protection Agency. Also known as the Superfund list. List of the worst hazardous waste sites that have been identified by Superfund.

PRP: Potentially Responsible Party. Entity that may have caused landfill contamination. May be an individual, business/corporation, or governmental entity.

Remediation: Corrective action.

VOC: Volatile Organic Compound. A number of chemical pollutants causing dangerous contamination.

# **Sauk County Landfill Plan - 2006**

## **Attachment A - Map**



